

K090897

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**510(k) Summary of Safety and Effectiveness**  
**Tritanium® Non-Modular Shell & X3® All-Poly Insert**

OCT 23 2009

Proprietary Name: Tritanium® Non-Modular Shell & X3® All-Poly Insert

Common Name: Artificial Hip Replacement Components- Acetabular

Classification Name/Reference: Hip joint metal/polymer/metal semi constrained porous coated uncemented prosthesis

Hip joint metal/polymer semi-constrained cemented prosthesis.

Hip joint metal/ceramic/polymer semi-constrained cemented or nonporous uncemented prosthesis.

Device Product Code: 87 LPH, 87LZO, 87MEH, 87JDI

Proposed Regulatory Class: Class II

For Information contact: Avital Merl-Margulies  
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Date Summary Prepared: October 19, 2009

**Description:**

The Tritanium® Non-Modular Shell described in this Traditional 510(k) submission consist of single use devices which is intended for cementless fixation within the prepared acetabulum. The X3® All-Poly Insert, also single use devices, are intended to mate only with the Tritanium® Non-Modular Shell and must be fixed with bone cement within the metal shell.

The assembled acetabulum component is used in conjunction with any appropriately sized Howmedica Osteonics stem with a compatible head size, excluding bi-polar and uni-polar heads, to that of the respective insert, to achieve total reconstructive replacement of the hip joint.

**Intended Use:**

The Tritanium® Non-Modular Shell & X3® All-Poly Insert are a sterile, single use device intended for use in both primary and revision applications.

**Indications:**

1. Noninflammatory degenerative joint disease including osteoarthritis and avascular necrosis;
2. Rheumatoid arthritis (excepting the OSTEOLOCK HA Acetabular Cup);
3. Correction of functional deformity;
4. Revision procedures where other treatments or devices have failed; and,
5. Treatment of nonunion, femoral neck and trochanteric fractures of the proximal femur with head involvement that are unmanageable using other techniques

The Tritanium® Non-Modular Shell is intended for cementless use, while the X3® All-Poly Insert is intended for cemented use only.

**Substantial Equivalence:**

The Tritanium® Non-Modular Shell & X3® All-Poly Insert is substantially equivalent to other commercially available acetabular systems in regards to intended use, design features, materials, and operational principles. The following devices are examples of predicate systems: Trident™ Porous Titanium Acetabular Shell, Zimmer Trabecular Metal™ Acetabular Revision System, Trident® Constrained Acetabular Insert, & Trident® Large Diameter Acetabular Inserts.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

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Food and Drug Administration  
10903 New Hampshire Avenue  
Document Control Room W-066-0609  
Silver Spring, MD 20993-0002

OCT 23 2009

Re: K090897

Trade/Device Name: Tritanium Non-Modular Shell & X3 All-Poly Insert  
Regulation Number: 21 CFR 888.3358  
Regulation Name: Hip joint metal/polymer/metal semi-constrained porous-coated uncemented prosthesis  
Regulatory Class: II  
Product Code: LPH, LZO, MEH, JDI  
Dated: October 19, 2009  
Received: October 21, 2009

Dear Ms. Merl-Margulies:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

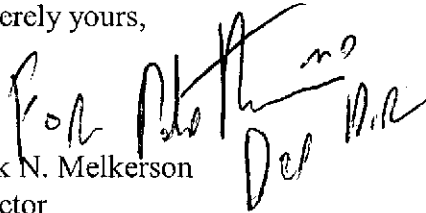
If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to <http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOices/ucm115809.htm> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Mark N. Melkerson', with a stylized flourish at the end.

Mark N. Melkerson  
Director  
Division of Surgical, Orthopedic,  
and Restorative Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

Indications for Use

510(k) Number (if known): K090897

Device Name: Tritanium® Non-Modular Shell & X3® All-Poly Insert

Indications for Use:

1. Noninflammatory degenerative joint disease including osteoarthritis and avascular necrosis;
2. Rheumatoid arthritis (excepting the OSTEOLock HA Acetabular Cup);
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Prescription Use   X    
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE OF  
NEEDED)

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Concurrence of CDRH, Office of Device Evaluation (ODE)

*Jonathan J. for MXM*  
(Division Sign-Off)  
Division of Surgical, Orthopedic,  
and Restorative Devices

510(k) Number   K090897